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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,838	12/15/2004	Yoji Aramaki	1163-0516PUS1	1333
2292 7590 03/12/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER GLENN, KIMBERLY E	
			ART UNIT	PAPER NUMBER
			2817	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/12/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/12/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/517,838

Applicant(s)

ARAMAKI ET AL.

Examiner

Kimberly E. Glenn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,6 and 7 is/are rejected.
- 7) ☒ Claim(s) 2-5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Ekelman Jr et al (of record).

Ekelman Jr et al disclose in figure 1 an four port combiner comprising an main waveguide (electric wave branch means) for branching a horizontally polarized electric wave included in a circularly-polarized-wave signal inputted thereto toward first junction A (first horizontal symmetrical directions), and for branching a vertically polarized electric wave included in the circularly-polarized-wave signal toward a second junction B (second horizontal symmetrical directions); the junction A comprising two U shaped waveguides 22 and 23 (a first radio wave conducting means) for conducting a first electric wave of the horizontally polarized electric wave branched by main waveguide, for conducting a second electric wave of the horizontally polarized electric wave, one end of both the U shaped waveguide are connected to a hybrid tee 24 for combining the first and second electric waves of the horizontally polarized electric wave and dividing the combined electric wave into a first basic mode electric wave TE 11 and a first higher mode electric wave, and for outputting them through ports 25 and 26 ; and the junction B comprising two U shaped waveguides 32 and 33(a second radio wave

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conducting means) for conducting a first electric wave of the vertically polarized electric wave branched by main waveguide, for conducting a second electric wave of the vertically polarized electric wave, one end of each of the U shaped waveguides 32 33 are connected to a hybrid tee 34 for combining the first and second electric waves of the vertically polarized electric wave and dividing the combined electric wave into a second basic mode electric wave TE₁₁ and a second higher mode electric wave TE₂₁, and for outputting them through ports 35 and 36 (column 4; line 19 through column 8; lines 44.

Ekelman Jr et al states in column 5; line 26-29, that "During normal operation, signals are passed through the in-phase port 26, and the out-of-phase port 26 is covered with a load plate (not shown) having a conventional termination load on its inner surface or simply a shorting cover plate." It is well known in the art for termination load to be constructed on dielectric.

Allowable Subject Matter

Claims 2-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Davidovitz US Patent 5,539,361 discloses a dielectric 11-5 figure 2f acting a terminating load.

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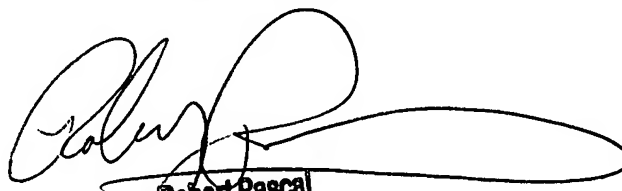
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly E. Glenn whose telephone number is (571)-272-1761. The examiner can normally be reached on Monday-Friday 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571)-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kimberly E Glenn
Examiner
Art Unit 2817

20070305 keg



Robert Pascal
Supervisory Patent Examiner
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